



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D2600-5-108
Job Sheet 187466



Part No: D2600-5-108

Job Qty: 240 pcs

Part Name: Extrusion I-Beam Thin



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 12/5/18

Job Tracking No:

Due Date: 1/16/19

Created By: Chantal Lavoie

Type: Stock

Description:

Note: DWG REV E

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	240 pcs	1/16/19	1/16/19	0.00	0.00	Purchasing - 1		M 1/16/19
							Purchasing - 2		
							Purchasing - 3		
110	Packaging 2-1 - Receive - B4B	240 pcs	1/16/19	1/16/19	0.00	0.00	Packaging 2 - 1 - B4B		M 1/16/19
							Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
120	QC 6	240 pcs	1/16/19	1/16/19	0.00	0.00	QC 6 - 16		DAS 61 9-89
							QC 6 - 38		
							QC 6 - 42		
							QC 6 - 9		
							QC 6 - 68		
130	Packaging 3-1 - Stock - B4B	240 pcs	1/16/19	1/16/19	0.00	0.00	Packaging 3 - 1 - B4B		DAS 21 9-89 JAN 7 4 2019
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		
							Packaging 3 - 6 - B4B		
							Packaging 3 - 7 - B4B		
							Packaging 3 - 8 - B4B		
							Packaging 3 - 9 - B4B		
140	QC 21 - SA	240 pcs	1/16/19	1/16/19	0.00	0.00	Packaging 3 - 10 - B4B		
							QC 21 - SA - 16		

Part Op 100 - Issue P/O: 41949 a) Extrude as per Dwg D2600 (130" long) b) Material: 6061-T6 c) Material certification is required. ***EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS.*** MUST BE WELL PACKAGE, IF NOT IT WILL BE REFUSE***

110 - (Receive & Inspect for Damage & Mat'l Certs), Ensure material certification is attached

120 - (QC6- All purchased or subcontracted products), Check Pull test per Dwg D2600 for compliance page attached
Check hardness with Webster tester

130 - (Identify as per dwg & Stock Location: _____), LOCATION : LG002

140 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2600-5-108P	Extrusion 'I Beam' Thin	240 pcs (1 ea)	100-Purchasing	5146148

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	D2600-5-108P	240	0	0

Part Specifications

Specifications could not be found.

SPECIFICATION CONTROL DRAWING

D2600-X-XXX EXTRUSION

NOTES:

1) MATERIAL: 6061-T6 ALUMINUM PER QQ-A-200/8 OR AMS-QQ-A-200/8 OR ASTM B221

MINIMUM TENSILE YIELD STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 40 KSI
MINIMUM ELONGATION = 8%

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE ABOVE MINIMUM MECHANICAL PROPERTIES

- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N & B/N PER DART QSI 044 6.1 (FINE POINT PERMANENT INK MARKER)
- 7) WEIGHT: D2600-1 = 0.078 lb/in, D2600-3 = 0.130 lb/in, D2600-5 = 0.045 lb/in, D2600-7 = 0.091 lb/in
- 8) NO TOOLING MARKS
- 9) FOR D2600-1, PART NUMBER IS D2600-1-XXX WHERE XXX IS CUT LENGTH (EX. D2600-1-160 IS 160" LONG).
D2600-1 EXTRUSION MANUFACTURED FROM:
- CARADON INDALEX DIE # MH-18870
- SIGNATURE ALUMINUM (BON-L) DIE # 897121
- 10) FOR D2600-3, PART NUMBER IS D2600-3-XXX WHERE XXX IS CUT LENGTH (EX. D2600-3-120 IS 120" LONG).
D2600-3 EXTRUSION MANUFACTURED FROM:
- CARADON INDALEX DIE # MH-18859
- SIGNATURE ALUMINUM (BON-L) DIE # 897122
- 11) FOR D2600-5, PART NUMBER IS D2600-5-XXX WHERE XXX IS CUT LENGTH (EX. D2600-5-108 IS 108" LONG).
D2600-5 EXTRUSION MANUFACTURED FROM:
- CARADON INDALEX DIE # MS-18871
- 12) FOR D2600-7, PART NUMBER IS D2600-7-XXX WHERE XXX IS CUT LENGTH (EX. D2600-7-125 IS 125" LONG).
D2600-7 EXTRUSION MANUFACTURED FROM:
- CARADON INDALEX DIE # MS-18872

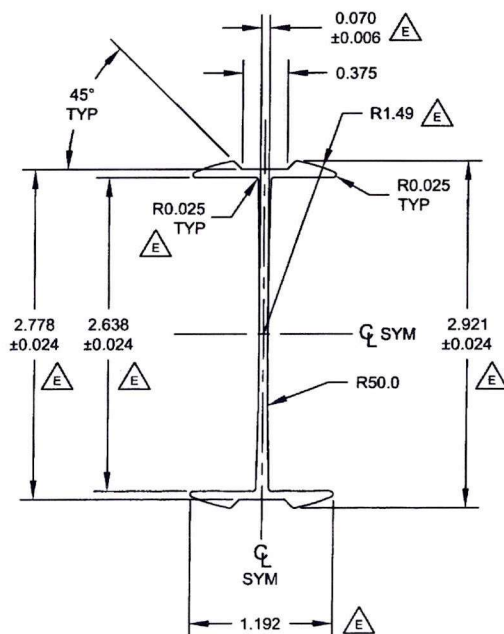
RELEASED
2012-01-11

E	REFORMAT DWG; ALL DIMS & TOL. UPDATE TO MATCH MFG DIE DWGS; ADD ASTM B221 SPEC (D8-1)	CP	11.10.18
D	INCREASE MIN. UTS TO 40 KSI	DS	98.08.20
C	ADD D2600-3, UPDATE D2600-1 WIDTH, ADD DIE NO.	DS	98.04.16
B	CHANGE MATERIAL SPEC.	DS	97.09.09
A	NEW ISSUE	DS	97.01.21
REV.	DESCRIPTION	BY	DATE
DESIGN	4	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JP		
CHECKED	AS	DRAWING NO.	REV. E
MFG. APPR.	BE	D2600	SHEET 1 OF 3
APPROVED	TH	TITLE	SCALE
DE APPR.	TH	EXTRUSION	NTS
DATE	11.10.18	COPYRIGHT © 1997 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

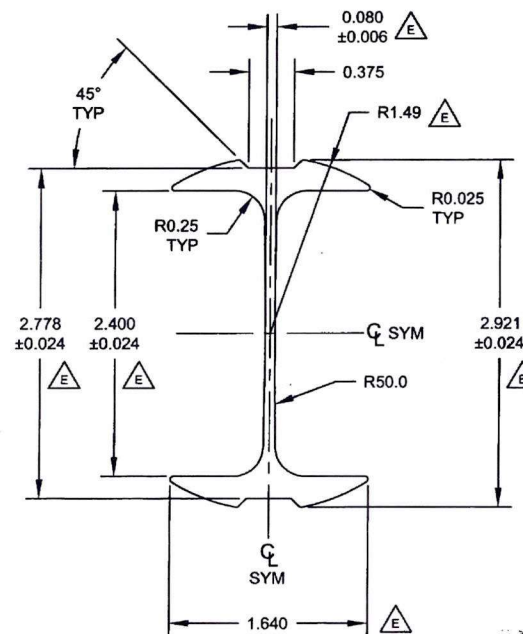


RELEASED
2012-01-11

DESIGN	<i>1</i>	DART AEROSPACE LTD	
DRAWN	<i>AS</i>	HAWKSBURY, ONTARIO, CANADA	
CHECKED	<i>AS</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>AS</i>	D2600	SHEET 2 OF 3
APPROVED	<i>AS</i>	TITLE	SCALE
DE APPR.	<i>AS</i>	EXTRUSION	NTS
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D2600-5 EXTRUSION



D2600-7 EXTRUSION

RELEASED
2012-01-11
MD

DESIGN	4	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	9		
CHECKED	ASS	DRAWING NO.	REV. E
MFG. APPR.	EL	D2600	SHEET 3 OF 3
APPROVED	#	TITLE	SCALE
DE APPR.	#	EXTRUSION	NTS
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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041949

Supplier: SAP001-VC
Hydro
c/o M91634, P.O. Box 11634
Succursale Centre Ville
Montreal
QC
H3C 5Y9 Canada
Phone: 877-922-7272
Fax: 800 563 8310

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO041949

PO Date: 12/5/18

Due Date: 1/16/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Via: Ground

Pynt Terms: Net 30

Freight Terms:

Special Comments:

E-MAILED
DEC 06 2018

Items													
Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
✓ AK	187466	D2600-5-108P			Extrusion 'I Beam' Thin EXTRUDE AS PER DWG D2600-5 REV. E NOTE: LENGHT 108" DIE NO. MS-18871	Firmed	-	1/16/19	240 pcs	0 pcs / 252x	240 pcs	\$15.0625/pcs	\$3,615.00
Line Item Note EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE OUTSIDE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES,NICKS,OR DENTS													
Grand Total:												\$3,615.00	

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Plex 12/5/18 11:15 AM dart.lavoie.chantal

**Hydro Extrusion Canada, Inc**

325, rue Avro
Pointe-Claire Québec H9R 5W3
Téléphone:(514)697-5120
Télécopieur: (514) 694-8310

Packing Slip / 0150682
Détail de Livraison

Order no/
Commande **8120260 1**

Ship to/Expédiée à DART AEROSPACE LTD 1270 ABERDEEN STREET HAWKESBURY, ONT K6A1K7				Sold to/Vendu à DART AEROSPACE LTD 1270 ABERDEEN STREET HAWKESBURY, ONT K6A1K7				Special Instr / Instr. Spéciales			
Cust No/No du Client 201355		Cust No/No-PQ du Client 41949		PPD/PAYÉ X	Ord Dte/Dte Comm 18/12/06		Our Ord Dte/ Notre Dte la Comm 18/12/06		Hydro H.S.T #: R857314058		
PST/TPV * 6122-5207			Terms/Cond	Date Required/ Date Requite		Shipped/ Expedi 19/01/17	Shipped Via/ Expédiée Par OTTAWA 18 JANV				
Item No	Ordered Weight Pcs/ Commande Poids Pcs	Hydro Die no/ Matrice d'Sapa	Customer Description/ Description de Client	Alloy & Temper/ Alliage et Trempeage	Length Longueur	Backorder Wgt Pcs Arrière Poids Pcs	This Shipment Bdis Pcs Wght Com Expédiée Ballots Pcs Poids				
1	500 240		DUE=2019/01/22 JA16 D-2600-5 LIGHT DUTY MS 18871 D2600-5-108P 6061 T6 2743MM BUNDLE= 1389454 1389455 We hereby certify that the material supplied meets the chemical properties as published by the Aluminum Association, and requirements of our Quality procedures				2 252 496 KGS				

Aluminum Extrusions - Anodizing - Fabrication - Painting
Profils D'Aluminum - Anodisation - Fabrication - Peinture

The above items were received in good order.
Les articles ci-dessus ont été reçu en bon ordre.

By/Par.....



Rapport des propriétés mécaniques Certified Test Report

Client / Customer: **DART AEROSPACE LTD**
Adresse / Address: **270 ABERDEEN STREET
HAWKESBURY ONT,
K6A 1K7**

commande Hydro / Hydro order #: **8120260**

bon de commande / Purchase order #: **41949**

de matrice / Die #: **MS 18871**

Description : **D-2600-5 LIGHT DUTY WEB**

Alliage & trempage / Alloy & temper: **6061 T6**

Customer Part #: **D2600-5-108P**

Contrôle / Control #: **26194-1**

Conductivité / Conductivity : **N/A**

Coulée / Cast #: **74109**

Propriétés mécaniques Mechanical Properties	Min.requis Min.required	Résultat actuel Actual results
Tension ultime Ultimate stress (ksi)	38.0	45.1
Contrainte élastique Yield stress (ksi)	35.0	40.7
% élongation dans 2" % elongation in 2"	8	10.0
Dureté Rockwell E (hre) Rockwell E Hardness (hre)	88 @ 100	92

Composition chimique Réelle / Real chemical composition :

Alliage	Cast no	Cu	Mg	Si	Fe	Mn	Ti	Zn	Cr
N/A									

Certificat

Hydro Extrusion Canada, Inc. certifie par la présente que le métal expédié sous ce rapport a été testé conformément à la norme ASTM identifié et / ou spécifications ASME et les résultats de l'analyse chimique et les propriétés mécaniques des tests sont dans les plages d'acceptabilité des spécifications. La garantie du produit est régie par Extrusion Amérique du Nord. Les conditions standard des ventes sont affichées sur la page web : www.hydroextrusions.com/termsconditions.

Certification

Hydro Extrusion Canada, Inc. hereby certifies that the metal shipped under this report has been tested in accordance with the identified ASTM and/or ASME specifications and the results of the chemical analysis and mechanical properties tests are within the acceptable ranges of these specifications. Any product warranty is governed by the Extrusion North America Standard Terms and Conditions of Sale posted at www.hydroextrusions.com/termsconditions.

Sincèrement vôtre,
Yours truly,

Date : **2019-01-15**

Mike Bouharevich
Directeur d'usine
Plant Manager

Hydro
Extrusion North America
325 Avro
Pointe-Claire, QC H9R 5W3
Canada

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: D2608-5-108
 DATE: 1/10/21

PO / BATCH NO.: P0041949/S146203

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 252x
 QUANTITY INSPECTED: 252x
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.192"
 THICKNESS RECEIVED: 1.192"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<u>(N)</u>	
CORRECT FINISH	<u>(Y)</u>	N	
CORROSION	Y	<u>(N)</u>	
CORRECT GRAIN DIRECTION	<u>(Y)</u>	N	
CORRECT MATERIAL PER M-DRAWING	<u>(Y)</u>	N	<u>6061 T6</u>
CORRECT THICKNESS	<u>(Y)</u>	N	
PHOTO REQUIRED	Y	<u>(N)</u>	
CORRECT REF # TO LINK CERT	<u>(Y)</u>	N	<u>P0041949</u>
CORRECT MATERIAL IDENTIFICATION	<u>(Y)</u>	N	
CORRECT M# ON THE MATERIAL	<u>(Y)</u>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<u>(N)</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<u>(N)</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 61</u> DATE: <u>1/10/21</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in